# 2019 AWARDS



# American Meteorological Society 99 th ANNUAL MEETING | PHOENIX | 2019

The objective of this Society is to advance the atmospheric and related sciences, technologies, applications, and services for the benefit of society. The Society shall be a nonprofit organization, and none of its net income or net worth shall inure to the benefit of its members. Its membership and activities shall be international in scope.

These awards are given because people took the time to submit a nomination for a qualified individual by following procedures at www.ametsoc.org/awards.

Society awards are presented at the Annual Meeting, specialized conferences, or other appropriate occasions during the years.

#### **American Meteorological Society**

45 Beacon Street, Boston, Massachusetts 02108 617-227-2425 amsmem@ametsoc.org www.ametsoc.org 99<sup>TH</sup> ANNUAL REVIEW, NEW FELLOWS, AND FEATURED AWARDS

Sunday, 6 January 2019





#### Scott A. Braun

Research Meteorologist, NASA/GSFC, Greenbelt, Maryland

Dr. Scott A. Braun, a research meteorologist at NASA Goddard Space Flight Center, is the project scientist for NASA's GPM and TROPICS missions, and was previously project

scientist for the TRMM satellite and principal investigator for the Hurricane and Severe Storm Sentinel (HS3) airborne investigation, a five-year project using NASA's Global Hawk aircraft to investigate Atlantic hurricanes. He received his Ph.D. in atmospheric sciences from the University of Washington, Seattle, in 1995.



#### Leo Donner

Physical Scientist, NOAA/GFDL and Lecturer, Princeton University, Princeton, New Jersey

After receiving his Ph.D. from The University of Chicago, Leo Donner held positions there and at NCAR prior to joining GFDL and Princeton. His research

focuses on clouds, convection, and climate. He chairs the advisory board for the Community Earth System Model and has served as science chair for the GFDL Atmospheric Model-3 (United States Department of Commerce Group Gold Medal), editor of the *Journal of Climate*, and chair of the UCAR Board of Trustees.



#### Pamela G. Emch

Northrop Grumman Aerospace Systems, Redondo Beach, California

Dr. Pamela Emch is an engineering fellow at Northrop Grumman where she supports weather, climate, and environmental remote sensing activities. Her roles

have included leading science/engineering teams and strategic planning and development. Pam earned an M.S in aerospace engineering from USC and a Ph.D. in civil and environmental engineering (water resources) from UCLA. She serves on the National Academies Board on Atmospheric Sciences and Climate and is the AMS Weather, Water, and Climate Enterprise Commissioner.



#### Jack D. Fellows

Climate Change Science Institute Director Emeritus, Oak Ridge National Laboratory, Oak Ridge, Tennessee and University of Tennessee Professor

Dr. Fellows' career started as a University of Maryland research faculty researching the use of satellite data in hydrologic

models. He was the 1984 AGU congressional science fellow. In 1985, he joined the White House staff and oversaw a range of federal research programs and helped create the U.S. Global Change Research Program. He was the UCAR vice president 1997-2012, and the Climate Change Science Institute director at Oak Ridge National Laboratory 2013-2018.



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#### David J. Gochis

Scientist, National Center for Atmospheric Research, Boulder, Colorado

Dr. Gochis has conducted field observation and modeling research at NCAR since 2002. His academic background is inter-disciplinary between the meteorological and hydrological

sciences and civil and agricultural engineering. He has worked as a consulting engineer where he conducted channel hydraulics and water resources studies. His research has focused on observation, diagnosis and modeling of precipitation and runoff processes in complex terrain. Most recently he helped lead the implementation of the NOAA National Water Model.



#### Mitchell D. Goldberg

Chief Scientist, NOAA Joint Polar Satellite System, Lanham, Maryland

Dr. Mitch Goldberg joined NOAA is 1990 and is currently the Joint Polar Satellite System (JPSS) chief scientist and was the former chief of the NOAA Satellite Meteorology and Climatology

Division. He earned his B.S. from Rutgers University, and M.S. and Ph.D. degrees from the University of Maryland. He is responsible for the scientific integrity of the JPSS Program and engages user communities through studies promoting new and improved applications.



#### Sue Ellen Haupt

Senior Scientist & Deputy Director, Research Applications Laboratory, NCAR, Boulder, Colorado

Sue Ellen Haupt is a senior scientist and deputy director of the Research Applications Laboratory of NCAR. She currently serves on the AMS

Council, is director of education for the World Energy and Meteorology Council, and is an adjunct professor of meteorology at The Pennsylvania State University. She previously chaired the AMS Committee on Applications of Artificial Intelligence. Her research focuses on applications of meteorology to renewable energy, boundary layer meteorology, and numerical and artificial intelligence methods.



#### Gabi Hegerl

Professor of Climate System Science, University of Edinburgh, United Kingdom

Gabi Hegerl's work focuses on identifying the drivers and mechanisms of observed climate change. She published some of the first studies detecting climate change in observations,

pioneered a method that distinguishes between possible causes for climate change, and estimated climate sensitivity. Gabi's recent work has focused on attributing causes to changes in precipitation and extreme events, and to temperature changes over the last millennium. She has also had key roles in past IPCC assessments.



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#### George J. Huffman

Research Meteorologist, NASA/GSFC, Greenbelt, Maryland

Dr. Huffman moved to GSFC in 1988, where he consulted until joining NASA in 2012, and where he focuses on creating and analyzing global precipitation data sets. He is the deputy

project scientist for GPM and the assistant chief for the Mesoscale Atmospheric Processes Laboratory. Dr. Huffman holds a Ph.D. in Meteorology from Massachusetts Institute of Technology, and has received a NASA Exceptional Achievement Medal (2015) and a NASA Exceptional Service Medal (2018).



#### Fei-Fei Jin

Professor, SOEST, University of Hawaii at Manoa, Honolulu, Hawaii

Fei-Fei Jin is a professor at SOEST of University of Hawaii. He received his B.S. (1982) from Nanjing University of Information Science and Technology and Ph.D. (1985) from Institute of

Atmospheric Physics of Chinese Academy. His research interests cover a broad range of topics on large-scale atmosphere and ocean circulations and climate variability, with a focus on the dynamics of El Niño-Southern Oscillation and extratropical atmospheric variability. He is an AGU fellow.



#### Benjamin Kirtman

Professor, Atmospheric Science, RSMAS, University of Miami, Miami, Florida

After receiving his Ph.D. from the University of Maryland – College Park, Ben Kirtman was a research scientist at the Center for Ocean-Land-Atmosphere Studies before becoming a

professor of atmospheric science at the University of Miami Rosenstiel School for Marine and Atmospheric Science. Ben's research has focused on predictability and prediction of the climate system on time-scales of days to decades. Ben's research has greatly benefitted from collaborations with his current and former students and post-docs.



#### Petra M. Klein

Executive Associate Dean, College of Atmospheric and Geographic Sciences and Professor, School of Meteorology, University of Oklahoma, Norman, Oklahoma

Dr. Klein serves as executive associate dean in the College of Atmospheric and Geographic

Sciences and professor in the School of Meteorology at the University of Oklahoma (OU). She joined OU in 2001 after graduating with a Ph.D. from the University of Karlsruhe, Germany and a Post-Doc appointment at ETH Zurich, Switzerland. Her research focuses on boundary-layer meteorology and atmospheric dispersion. She received an NSF Career award in 2006 and Presidential Professorship in 2009.



#### Delores J. Knipp

Research Professor, University of Colorado Boulder, Boulder, Colorado

Delores Knipp is a research professor at the University of Colorado Boulder and a senior research associate at the NCAR High Altitude Observatory. Her research focuses on weather at

the space-atmosphere interaction region. She advances scientific use of space environment observations and promotes education related to space weather. She is a retired USAF Officer and the editor-in-chief of *Space Weather: The International Journal of Research and Applications*. Delores earned her Ph.D. at UCLA.



#### **Praveen Kumar**

Professor, Department of Civil and Environmental Engineering, University of Illinois, Urbana, Illinois

Praveen Kumar holds Ph.D. from the University of Minnesota (1993) in civil engineering, and has been on the UIUC faculty since 1995. He is also a Fellow

of AGU. From 2009-2013 he served as the editor-in-chief of *Water Resources Research* and before that as editor of *Geophysical Research Letters*. He is presently the editorin-chief of *Frontiers in Water* journal. He is also the director of the NSF funded Critical Zone Observatory for Intensively Managed Landscapes.



#### Gary M. Lackmann

Professor, North Carolina State University, Raleigh, North Carolina

Dr. Gary Lackmann is a professor at North Carolina State University. His research focuses on high-impact synoptic, mesoscale, and tropical weather systems, and how these systems

are affected by climate change. Gary earned B.S. and M.S. degrees from the University of Washington and a Ph.D. from SUNY Albany. Professional appointments include NOAA/ PMEL, the Naval Postgraduate School, McGill University, and SUNY Brockport. Gary currently serves as editor-in-chief of *Weather and Forecasting*, and on the AMS Council.



#### Paul Markowski

Professor of Meteorology, The Pennsylvania State University, University Park, Pennsylvania

Paul Markowski is a professor of meteorology at The Pennsylvania State University, where he specializes in severe storms research. He is the recipient of the AMS Clarence

Leroy Meisinger Award and Editor's Award, NWA's Fujita Award, ESSL's Dotzek Award, and NSF's CAREER Award. He also co-organized the Second Verification of the Origins of Rotation in Tornadoes Experiment (VORTEX2), has co-authored a textbook (Mesoscale Meteorology in Midlatitudes), and served as chief editor of Weather and Forecasting.



#### Shawn W. Miller

Technical Director, Navigation, Weather, and Services, Raytheon Intelligence, Information, and Services, Aurora, Colorado

Shawn Miller is an engineering fellow and certified architect with Raytheon. He is currently the technical director for Navigation, Weather, and Services. He

has been working in various aspects of weather and environmental programs for 27 years. He obtained a Ph.D. in Aerospace Engineering Sciences at the University of Colorado Boulder, in 1995. Shawn is also a past chair of the AMS Board on Enterprise Economic Development (BEED), and continues to serve as a BEED member today.



#### Michael Cottman Morgan

Professor, Department of Atmospheric and Oceanic Sciences, University of Wisconsin-Madison, Madison, Wisconsin

Dr. Michael Cottman Morgan is a professor in the Department of Atmospheric and Oceanic Sciences at the University of

Wisconsin-Madison. His research interests are on the analysis, diagnosis, prediction, and predictability of midlatitude and tropical weather systems. Dr. Morgan has also broad public policy interests in issues related to education and the support and conduct of research. Dr. Morgan received his S.B. (1988) and Ph.D. (1994) degrees from the Massachusetts Institute of Technology.



#### Rebecca E. Morss

Senior Scientist and Deputy Director, Mesoscale and Microscale Meteorology Laboratory, NCAR, Boulder, Colorado

Rebecca E. Morss is a senior scientist at the National Center for Atmospheric Research, where she is also deputy

director of the Mesoscale and Microscale Meteorology Laboratory. Her research integrates atmospheric and social sciences, with a focus on weather hazard information systems. Her areas of expertise include weather prediction and predictability, risk communication, and information interpretation and use. Dr. Morss received a B.A. from the University of Chicago and Ph.D. from the Massachusetts Institute of Technology.



#### Shirley T. Murillo

Meteorologist and Deputy Director, NOAA Hurricane Research Division, Miami, Florida

Shirley Murillo is a meteorologist and deputy director of NOAA's Hurricane Research Division, located at the Atlantic Oceanographic and 11

Meteorological Laboratory in Miami, Florida. She oversees the everyday functions of the division and coordinates with the director on achieving their science research objectives. Shirley also leads the Observing System Simulation Experiment science team that investigates the quantitative/rational basis for observing system design, data assimilation, and forecast modeling decisions. Shirley also participates in hurricane hunter flights.



#### Mike Nelson, CBM

Chief Meteorologist, KMGH-TV, Denver, Colorado

Mike Nelson is the chief meteorologist for KMGH-TV Denver. Mike studied meteorology at the University of Wisconsin and began his career at Weather Central in Madison.

In the 1970s, Mike worked with Terry Kelly to develop one of the first weather computer systems for television. Mike estimates he has spoken to over one million students, educating and inspiring young people about meteorology and climate science! Mike is the chair of the AMS Station Scientist Committee.



#### Joyce E. Penner

Ralph J. Cicerone Distinguished University Professor of Atmospheric Science, University of Michigan, Ann Arbor, Michigan

Joyce Penner is the Ralph J. Cicerone Distinguished University Professor of atmospheric science at the

University of Michigan. Her research focuses on improving climate models through the addition of interactive chemistry and the description of aerosols and their effects on the radiation balance in climate models. She has played a key role in the last three Intergovernmental Panel on Climate Change (IPCC) reports, and was the lead editor for Aviation and the Global Atmosphere (1999).



#### Zhaoxia Pu

Professor, Atmospheric Sciences, University of Utah, Salt Lake City, Utah

Zhaoxia Pu is a professor of atmospheric sciences at the University of Utah. Her research interests include numerical weather prediction, data assimilation, atmospheric

boundary layer over complex terrain, tropical cyclones, and observing system simulation experiments. She has published extensively in the related areas. She has also served on AMS committees and was program chairperson for several AMS conferences. She is currently an editor for *Weather and Forecasting*.



#### Timothy J. Schmit

Satellite Research Meteorologist, NOAA/NESDIS/Center for Satellite Applications and Research, Madison, Wisconsin

With bachelors and masters degrees from the University of Wisconsin-Madison, Tim has dedicated his career to scientific

support of multiple GOES missions and instruments, including the GOES-16 ABI. His research interests span calibration, visualization, and algorithm development and he is committed to research-to-operations, training others and science communication. Selected awards: Department of Commerce Gold Medal, NWA T. Theodore Fujita Research Achievement Award, and 2018 finalist for the Samuel J. Heyman Service to America Award.



#### David M. Schultz

Professor of Synoptic Meteorology, The University of Manchester, Manchester, United Kingdom

David Schultz (B.S. MIT; M.S. University of Washington; Ph.D. SUNY Albany) previously worked for NOAA/NSSL and University of Oklahoma, and Finnish

Meteorological Institute and University of Helsinki. He has published 150 articles on phenomenon from as small as tornadoes to as large as the Jurassic planetary-scale circulation. He is twice winner of Manchester's Teaching Excellence Award and author of <u>Eloquent Science: A</u> <u>Practical Guide to Becoming a Better Writer, Speaker, and Atmospheric Scientist</u>.



#### Martin Visbeck

Professor, GEOMAR Helmholtz Centre for Ocean Research Kiel and Kiel University, Kiel, Germany

Prof. Visbeck holds the physical oceanography chair at the GEOMAR Helmholtz Centre for Ocean Research Kiel and Kiel University. His research

fields includes ocean circulation and mixing, climate and ocean sustainability. He uses data from research vessels supplemented increasingly by robotic platforms including profiling floats, gliders and ocean observatories. Furthermore, he is developing new conceptual frameworks to advance integrated marine research in the context of ocean sustainable development at the regional and international level.



#### **Rong Zhang**

Oceanographer and Head, Ocean and Cryosphere Division, NOAA/GFDL, Princeton, New Jersey

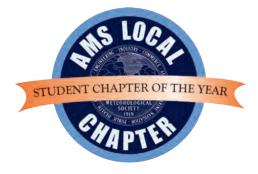
Dr. Zhang received her Ph.D. from MIT in 2001. She is head of the Ocean and Cryosphere division at NOAA/GFDL. Her research focuses on

the mechanisms of Atlantic multidecadal variability and associated decadal predictability, and the role of Atlantic meridional overturning circulation (AMOC) in many regional phenomena, such as Gulf Stream separation, Intertropical Convergence Zone shift, Sahel monsoon rainfall, Atlantic hurricane activity, and Arctic sea ice extent. She serves as editor of *Journal of Climate*.

# Local Student Chapter of the Year Award

The East Mississippi Student Chapter

Mississippi State, Mississippi

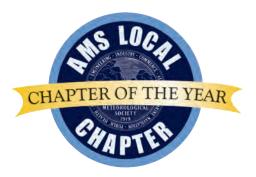


For creating numerous opportunities for members to broaden their professional networks and knowledge, and for strengthening the chapter's role within the national AMS community

#### Local Chapter of the Year Award

### The Blue Ridge Chapter

Blacksburg, Virginia



For excellence in community outreach and determined, successful efforts to increase membership and participation

#### The Peter V. Hobbs Student Prize

#### Isabel L. McCoy Ph.D. Candidate, University of Washington, Seattle, Washington

#### The Max A. Eaton Student Prize

#### Patrick T. Duran

Research Associate III, University of Alabama in Huntsville, Huntsville, Alabama



For her paper, "CLOUD-AEROSOL INTERACTIONS AND AEROSOL VARIABILITY NEAR SOUTHERN OCEAN LOW CLOUDS"

Isabel McCoy is earning her Ph.D. in atmospheric sciences from the University of Washington where she studies cloud-aerosol interactions and the influence of marine boundary layer clouds

on the climate, particularly in the Southern Ocean. Isabel graduated with a B.S. in physics from the New Mexico Institute of Mining and Technology, has earned both the NSF and AMS graduate research fellowships, and was recently awarded the DRI Wagner Award for Women in Atmospheric Science.



For his paper, "UPPER-TROPOSPHERIC STATIC STABILITY IN TROPICAL CYCLONES: OBSERVATIONS AND MODELING"

Patrick Duran is a research associate at the Earth System Science Center, University of Alabama in Huntsville. He obtained his Ph.D. in atmospheric science from the University at

Albany, SUNY in 2018, and a B.S. in meteorology from the Florida Institute of Technology in 2012. His research interests include tropical cyclone and boundary-layer dynamics, cloud physics, and turbulence. A native of St. Augustine, FL, he currently resides with his wife, Erika, in Huntsville, AL.

#### The Award for an Exceptional Specific Prediction

#### **National Hurricane Center**

Miami, Florida



For highly reliable and life-saving forecasts of Hurricanes Harvey, Irma, and Maria during the historic 2017 Atlantic hurricane season

During the historic 2017 hurricane season, the National Hurricane Center provided highly reliable forecasts and warnings. Hurricanes Harvey, Irma, and

Maria were historic storms impacting many millions of people from the damaging impacts of hurricanes such as storm surge, flooding rain, and hurricane winds. Even with south Florida in the impact zone, the Center continued its superior service even with staff members at risk.

#### **Editor's Award** Bulletin of the American Meteorological Society

Heather A. Holmes Assistant Professor, University of Nevada, Reno, Reno, Nevada Editor's Award Earth Interactions

**Tracy E. Twine** Associate Professor, University of Minnesota, Saint Paul, Minnesota



For comprehensive and constructive reviews that resulted in much stronger published papers

Heather Holmes is an assistant professor in the Atmospheric Sciences Program, Department of Physics at the University of Nevada, Reno. Her current research uses numerical weather prediction, chemical

transport modeling, and satellite remote sensing combined with ground-based monitors to investigate air pollution transport and provide data for human health and public policy assessments. She received a Ph.D. in mechanical engineering from the University of Utah in 2010.



For frequent, constructive, and thorough reviews that helped improve manuscripts

Dr. Tracy Twine is an associate professor at the University of Minnesota-Twin Cities. Her research interests include using both observational and numerical modeling techniques to examine land-atmosphere interactions in natural, managed, and urban

ecosystems. Tracy earned an M.S. and Ph.D. in atmospheric and oceanic sciences from University of Wisconsin-Madison, and a B.S. in meteorology from The Pennsylvania State University.

#### **Editor's Award** Journal of Applied Meteorology and Climatology

Jason M. Keeler Assistant Professor of Meteorology, Central Michigan, University, Mount Pleasant, Michigan

#### Editor's Award Journal of Atmospheric and Oceanic Technology

#### Annalisa Griffa

Senior Scientist, Istituto Scienze Marine (CNR-ISMAR), Italy



For multiple high-quality informative reviews

Jason Keeler completed his B.S. in meteorology at SUNY Oswego, and M.S. and Ph.D. in atmospheric sciences at the University of Illinois, followed by postdoctoral research at the University of Nebraska-Lincoln. He joined the faculty at Central Michigan University in

2018, where he teaches courses in dynamic and physical meteorology. His research interests are in mesoscale and boundary layer meteorology, which he investigates using idealized models, and field instrumentation including mobile mesonets and unmanned aircraft.



For incisive comments on the substance of manuscripts, and excellent suggestions to improve their presentation and impact

Annalisa Griffa is a physical oceanographer, involved in the study of ocean circulation and transport, with implications for pollution mitigation and biological application. She graduated from Scripps Institution of

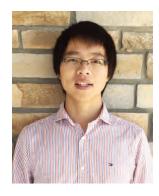
Oceanography, has been faculty at RSMAS University of Miami as research professor and is presently senior scientist at Consiglio Nazionale Ricerche (CNR) Istituto di Scienze Marine (ISMAR), in La Spezia Italy.

#### **Editor's Award** Journal of Atmospheric and Oceanic Technology

Haonan Chen Research Scientist, NOAA Earth System Research Laboratory, Boulder, Colorado

#### Editor's Award Journal of the Atmospheric Sciences

Hugh Morrison Senior Scientist, NCAR, Boulder, Colorado



For numerous and effective reviews on cloud and precipitation measurement methods and technologies

Dr. Chen is an NRC research associate at the NOAA/ESRL Physical Sciences Division. His research interests include precipitation classification and quantification using remote sensing technologies,

polarimetric radar systems and networking, and multiscale radar and satellite data fusion. He serves as a guest editor of *Remote Sensing* and an associate editor for *URSI Radio Science Bulletin*. He received a Ph.D. in electrical engineering from Colorado State University, where he is currently an affiliate faculty.



For numerous and insightful reviews in the areas of clouds and convection

Hugh Morrison is a scientist in the Mesoscale and Microscale Meteorology Laboratory at the National Center for Atmospheric Research. He received his Ph.D. from the University of Colorado in 2003 and has been at NCAR since 2005.

His research interests include cloud microphysics, cloud parameterization in atmospheric models of all scales, and moist convective dynamics. He has been involved with cloud parameterization development in the Community Atmosphere Model and Weather Research and Forecasting model, among others.

#### Editor's Award Journal of Climate

#### Suzana J. Camargo

Lamont Research Professor, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York

#### Editor's Award Journal of Climate

## Michael N. Evans

Associate Professor, University of Maryland, College Park, Maryland



For providing an extraordinary number of constructive reviews on various topics in tropical climate

Dr. Camargo received her B.Sc. and M.Sc. from the University of São Paulo and a Ph.D. from the Technical Munich University. She was a post-doc at the Max-Planck Institute for Plasma Physics and an associate professor at

São Paulo State University. Dr. Camargo has published extensively on the relationship of tropical cyclones and climate in various time-scales. Dr. Camargo is the executive director of the Columbia University Initiative on Extreme Weather and Climate.



For insightful and constructive reviews that provided key guidance to several challenging manuscripts

Mike Evans' research interests include development of new tropical paleoclimatic datasets, proxy system modeling, synthesis of observations and simulations of late Holocene environments for process

understanding, and uncertainty quantification. Since 2018 he is an editor for *Journal of Climate* and co-chair of PAGES (pastglobalchanges.org). He otherwise keeps busy raising his two daughters, making fermented foods, gardening, fixing the house, practicing yoga, and getting lost while on bicycle tour.

#### Editor's Award Journal of Climate

#### **Renguang Wu**

Professor, Chinese Academy of Sciences, Beijing, China

For providing an impressive number of high-quality reviews, submitted in a timely fashion, that improved the quality of manuscripts

Renguang Wu is a professor at the Institute of Atmospheric Physics of the Chinese Academy of Sciences. He received his Ph.D. in meteorology from the University of Hawaii in 1999.

He was a research scientist at the Center-for-Ocean-Land-Atmosphere Studies and a professor at the Chinese University of Hong Kong. His research areas include atmosphere-ocean interaction and climate variability on different time scales, monsoon-ocean interactions, and tropospheric biennial oscillation. Editor's Award Journal of Hydrometeorology

#### Bart Nijssen

Professor, University of Washington, Seattle, Washington



For continued, consistently high-quality, and very thorough reviews of difficult manuscripts

Bart Nijssen and his research group in civil and environmental engineering at the University of Washington build tools to simulate and investigate the terrestrial hydrological cycle. They use these tools to investigate the hydrologic effects

of climate change, perform forecasting studies, simulate components of the climate system, and develop and analyze large datasets. Along the way they write a lot of code that they are happy to share with others.

#### Editor's Award Journal of Physical Oceanography

Hidenori Aiki Associate Professor, Nagoya University, Aichi, Japan

#### Editor's Award Journal of Physical Oceanography

#### Sylvia T. Cole

Assistant Scientist, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts



For undertaking reviews others have shied away from, and providing timely and wellconsidered advice

Hidenori Aiki has been an associate professor at Nagoya University since 2016. He received his doctorate from The University of Tokyo in 2003, and was a researcher at Japan Agency for Marine-Earth Science

and Technology (2003-2015) and University of Hawaii (2007-2008). His primary interests include wave dynamics in the ocean and atmosphere, and tropical cyclone simulations using a coupled model. He is an associate editor of *Journal of Atmospheric and Oceanic Technology*.



For providing insightful reviews on a wide variety of topics, and serving as a reviewer for several different JPO editors

Sylvia Cole is a physical oceanographer at Woods Hole Oceanographic Institution investigating the Arctic and global oceans. She uses observations from the turbulent scale to the basin scale to

understand how energy and tracers are transported in the ocean. Her focus is on smaller spatial scale and sub-daily to seasonal scale processes. She received a Ph.D. from Scripps Institution of Oceanography in 2010.

#### Editor's Award Monthly Weather Review

Peter Banacos Lead Meteorologist, NOAA/National Weather Service WFO, South Burlington, Vermont Editor's Award Monthly Weather Review

Stan Trier Project Scientist, NCAR, Boulder, Colorado



For numerous insightful reviews from an operational meteorology perspective over a 15-year period

Peter Banacos is a lead meteorologist at the National Weather Service Forecast Office in Burlington, Vermont. Previously, he worked at the Storm Prediction Center in Norman, Oklahoma. His published research focuses on

convective storms, mesoscale winter weather phenomena, synoptic climatology, and tools and training for operational forecasters. He earned a master's degree in meteorology from the University of Oklahoma and a bachelor's degree from Lyndon State College.



For providing thorough, constructive, and timely reviews of numerous manuscripts

Stan Trier is a project scientist in the Mesoscale and Microscale Meteorology Laboratory at NCAR. His research interests include mesoscale convective systems, environmental factors influencing convection initiation and its diurnal cycle, and effects

of deep convection on aviation turbulence. He received a B.S. in meteorology from Florida State University, an M.S. in meteorology from The Pennsylvania State University, and a Ph.D. in atmospheric science from Colorado State University.

#### Editor's Award Monthly Weather Review (and) Weather and Forecasting

Daryl T. Kleist Physical Scientist, NOAA/NWS/NCEP/EMC, College Park, Maryland



For thorough, constructive, and scientifically insightful reviews that assisted authors in strengthening their work while providing an operational perspective

Daryl Kleist is a physical scientist in the Modeling and Data Assimilation Branch of the NOAA/NWS/NCEP Environmental Modeling Center. He received

his B.S. (2001) and M.S (2003) degrees in atmospheric and oceanic science from the University of Wisconsin-Madison, as well as his Ph.D. (2012) from the University of Maryland-College Park. He has spent the majority of his career focused on improving data assimilation for operational global numerical weather prediction.

#### Editor's Award Weather and Forecasting

#### Stephen W. Bieda III

Science and Operations Officer, NOAA/National Weather Service Weather Forecast Office, Amarillo, Texas



For numerous thorough and insightful reviews that balance scientific rigor and operational perspectives

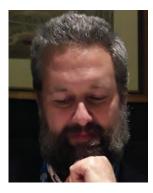
Stephen W. Bieda III is the science and operations officer at the National Weather Service (NWS) office in Amarillo, TX, where he has overall office responsibility of scientific research, training and operational

integrity. He earned his B.S., Masters, and Ph.D. degrees from the University of Arizona. Dr. Bieda came to the NWS in 2013 after working 4 years for the United States Air Force as a civilian research and training meteorologist.

#### Editor's Award Weather, Climate, and Society

#### Stefano Barontini

Assistant Professor, Università degli Studi di Brescia, Brescia, Italy



For detailed, constructive reviews through rounds of revisions to help the authors develop a solid publication

Stefano Barontini, degree in civil engineering (1999/2000) and Ph.D. in hydraulic engineering (2005), is assistant professor at the University of Brescia (Italy). His research activity, both theoretical, experimental

and numerical, is mainly focused on soil hydrology; hydrogeological risk mitigation; climatic changes and water balance in climate change scenarios; and traditional irrigation techniques in water--scarcity conditions. Since 2010 he teaches the course of Environmental Hydraulics for MEng students in Environmental Engineering.

#### Editor's Award Weather, Climate, and Society

#### Kimberly Klockow-McClain

Research Scientist and Societal Impacts Coordinator, Cooperative Institute for Mesoscale Meteorological Studies at National Severe Storms Laboratory, Norman, Oklahoma



For insightful, constructive, and extremely knowledgeable reviews

Kim Klockow-McClain is a research scientist and societal applications coordinator at CIMMS/NSSL. She specializes in behavioral science focused on weather and climate risk, especially the communication of forecast uncertainty and

hazardous weather warnings. Kim holds a Ph.D. in human geography from the University of Oklahoma, as well as an M.S. in professional meteorology from OU and degrees in economics and meteorology from Purdue University. After completing her Ph.D., Kim served as the AMS/UCAR Congressional Science Fellow.

#### The Award for Distinguished Science Journalism in the Atmospheric and Related Sciences

#### Matt Hongoltz-Hetling

Journalist, The Weather Channel, Lebanon, New Hampshire



For in-depth reporting that highlights often overlooked human and local impacts of climate change for the United States of Climate Change project

Matt Hongoltz-Hetling (@hh\_matt) is a New Englandbased journalist whose investigative work led to federal reforms of the U.S. Department of Housing and Urban

Development's Section 8 housing program. A Pulitzer finalist, he has been recognized with national, regional and state awards, including the George Polk Award. His work, including on the Ebola crisis from Sierra Leone, has appeared in *Foreign Policy*, *USA Today*, the Pulitzer Center on Crisis Reporting, and the *Atavist*, among other outlets.

#### Louis J. Battan Author's Award - K-12

#### **David Ezra Stein**

Author/illustrator, Candlewick Press, Somerville, Massachusetts



For the educational story of <u>Ice Boy</u> as he embarks on an amazing journey through the water cycle, changes phase, and reunites with his family

David Ezra Stein is the creator of many award-winning picture books, including <u>Interrupting</u> <u>Chicken</u>, which received a Caldecott Honor. He and his books have received many

other awards and accolades, including the Ezra Jack Keats Award. A graduate of the Parsons School of Design, Stein has worked as a window display artist, puppeteer, interior and set-design illustrator, and New Yorker cartoonist. Born in Brooklyn, he lives with his family in Kew Gardens, New York.

#### The Louis J. Battan Author's Award - Adult

#### Helen Czerski

Lecturer in the Department of Mechanical Engineering, University College London, United Kingdom



For <u>Storm in a Teacup: The</u> <u>Physics of Everyday Life</u>, an elegant and entertaining book that connects the physics of seemingly mundane things to big ideas like climate change

Helen Czerski is a physicist and oceanographer based at University College London. Her research focus is the physics of bubbles in the ocean, particularly

those formed by breaking waves. She has presented a wide range of science documentaries for the BBC over the past eight years, and loves to share her enthusiasm for the physics of everyday life, the ocean and the atmosphere. Her first book, <u>Storm in a Teacup</u>, was published in 2016.

# 99<sup>TH</sup> ANNUAL AWARDS BANQUET

Wednesday, 9 January 2019



#### The Robert E. Horton Lecturer in Hydrology

#### Justin Sheffield

Professor, University of Southampton, Southampton, United Kingdom



For advancing hydrologically coherent analyses of drought across time and space scales, and for pioneering the development of integrated drought monitoring tools for food-insecure countries

Justin Sheffield is professor of hydrology and remote sensing at the University of Southampton, UK. He spent 16

years at Princeton University before returning to the UK in 2016. His research is on large-scale hydrology and its interactions with climate variability and change, with a focus on drought risk. This research is applied to natural hazards impacts reduction, and water and food security in developing regions, including development of monitoring and prediction systems.

#### The Bernhard Haurwitz Memorial Lecturer

#### **Christopher S. Bretherton**

Professor, University of Washington, Seattle, Washington



For fundamental advances in understanding cloud processes across scales from turbulence and convection to atmospheric waves and large-scale circulations

Bretherton studies cloud formation and turbulence and their role in weather and climate. His research group leads field experiments and observational

analyses, does three-dimensional modeling of fluid flow in and around fields of clouds, understands how clouds will respond to and feed back on climate change, and develops turbulence and convective parameterizations used in leading U.S. climate models.

#### The Walter Orr Roberts Lecturer

**John E. Walsh** Research Professor, University of Alaska, IARC, Fairbanks, Alaska



For sustained contributions to understanding Arctic weather and climate, including the ecological and societal impacts of climate and cryospheric change at high latitudes

John Walsh is a research professor at the International Arctic Research Center, University of Alaska, Fairbanks, and a professor emeritus in the

Department of Atmospheric Sciences, University of Illinois. He has researched Arctic weather and climate for more than 40 years and has co-authored an undergraduate textbook, <u>Severe and Hazardous Weather</u>. Walsh has served as lead author for the IPCC and the National Climate Assessment, and is a Fellow of the AMS and the AAAS.

#### The Award for Early-Career Professional Achievement

#### Gina M. Eosco

Social Science Program Coordinator, CNSP support to NOAA Office of Weather and Air Quality, Silver Spring, Maryland



For outstanding leadership and dedication to embedding social science in the weather enterprise, and tireless efforts to address and overcome obstacles to communicating risk

Dr. Gina M. Eosco is a risk communication expert with Cherokee Nation Strategic Programs supporting NOAA's Office of Weather and Air

Quality. Her focus is on prioritizing social and behavioral science research needs within the weather community and determining ways to translate social science research into application. She holds a B.S. in environmental science and policy from the University of Maryland, and an M.S. and Ph.D. in weather risk communication from Cornell University.

#### The Nicholas P. Fofonoff Award

Malte F. Jansen Assistant Professor, The University of Chicago, Chicago, Illinois



For deep theoretical insight into geophysical turbulence and its implications for ocean circulation, climate, and paleoclimate

Malte Jansen is an assistant professor in the department of the Geophysical Sciences at the University of Chicago, where he studies the mysteries of the oceans while enjoying the fresh water of Lake Michigan. He

received his Ph.D. from MIT in 2012, and spent 2 years as a postdoctoral fellow at GFDL in Princeton. His research aims to improve our understanding of the large-scale dynamics of the oceans and the climate system.

#### The Henry G. Houghton Award

#### Jasper Kok

Associate Professor, University of California, Los Angeles Los Angeles, California



For novel approaches to studying the physics of dust emissions into the atmosphere and the interactions of dust aerosols with Earth's climate system and beyond

Jasper Kok obtained his Ph.D. in applied physics from the University of Michigan in 2009, for which he received a Distinguished Dissertation Award.

He then received an NSF postdoctoral fellowship and an NCAR Advanced Study Program postdoctoral fellowship before joining UCLA's Department of Atmospheric and Oceanic Sciences in 2013. His research focuses on physical processes relevant to climate and planetary sciences, and in particular on the physics of mineral dust emission and its climate impacts.

#### <sup>4</sup> The Clarence Leroy Meisinger Award

#### The Charles L. Mitchell Award

Samson M. Hagos Scientist, Pacific Northwest National Laboratory, Richland, Washington



For novel use of observations, theory, and modeling to advance understanding of tropical convection and its interactions with the large-scale circulation

Dr. Hagos earned his bachelor's degree from University of Asmara in Eritrea in 2000 and his Ph.D. from Cornell University in 2008. After a postdoctoral research work at the University of Miami,

he joined Pacific Northwest National Laboratory in 2009. Dr. Hagos' research interests include convection permitting dynamical and stochastic modeling of tropical precipitation processes over a wide range of scales, from microphysics and organization of clouds to sub-seasonal and seasonal variability and predictability.

#### Robert M. Thompson

NWS Meteorologist-in-Charge, National Weather Service (Retired), Westborough, Massachusetts



For outstanding leadership of the Boston Weather Forecast Office, dedication to the National Weather Service mission, and service to the citizens of southern New England

Bob Thompson retired as the Meteorologist-in-Charge of the Boston/Norton National Weather Service (NWS) Forecast Office at the end of April 2018. Bob

earned a B.S. degree at Florida State University and a M.S. degree at the University of Washington. He started as a student trainee at the NWS Boston office during the early 1970s and subsequently worked at offices in Albany, Anchorage, Silver Spring, and Reno before returning to the Boston area in November 1989.

## The Award for Excellence in Science Reporting by a Broadcast Meteorologist

# Derek Kevra, CBM

Broadcast Meteorologist, WJBK-TV, Southfield, Michigan



For extraordinary and groundbreaking use of graphics and cameras to explain weather and climate phenomena in creative and approachable ways

Meteorologist Derek Kevra goes way beyond answering, "will it rain today?" in his broadcasts. Using technology and creativity he explains the science behind the forecast and gives his

viewers an educational experience. Creating content that is shareable on social media, Derek's videos are viewed all over the country.

## The Award for Broadcast Meteorology

## Ada Monzón, CBM

Chief Meteorologist, WIPR-TV, San Juan, Puerto Rico



For long-term commitment to informing, educating, and inspiring resiliency in the people of Puerto Rico before, during, and after extreme events like Hurricane Maria

Ada Monzón is the trusted voice of meteorology in Puerto Rico, and her assured presence saved many lives during Hurricane Maria. She is chief

meteorologist for WIPR-TV, Univision Radio-WKAQ 580 am and Noticel, and is also the Founder and President of the EcoExploratorio: Museo de Ciencias de Puerto Rico. Ada has a M.S. in meteorology from Florida State University and is the first female American Meteorological Society (AMS) Fellow and Certified Broadcast Meteorologist in Puerto Rico.

## The Joanne Simpson Mentorship Award

## Christopher A. Davis

NCAR Associate Director for the Mesoscale and Microscale Meteorology Laboratory, NCAR, Boulder, Colorado



For patient, careful, and supportive mentoring of scientists during the formative stages of their careers

Chris Davis has served as Director of NCAR's MMM Laboratory since 2015. He came to NCAR in 1990 as an ASP postdoc and later became a senior scientist in 2006. Chris's research interests are mesoscale

dynamics and tropical cyclones, studied with both field observations and numerical modeling. He is a Fellow of the AMS. Chris has enjoyed working with and mentoring many outstanding early-career scientists over the past two decades.

# The Edward N. Lorenz Teaching Excellence Award

## Jennifer M. Collins

Professor, School of Geosciences, University of South Florida, Tampa, Florida



For creative, engaging, and challenging classroom lectures, and a passion for mentoring and encouraging students in undergraduate research

Jennifer Collins (President, West Central Florida Chapter of the AMS) is dedicated to her undergraduate and graduate students. She is PI on the Weather, Climate, and Society

REU. Dr. Collins researches the interaction between largescale climatic patterns and tropical cyclone activity. She also examines hurricane evacuation behavior with recent papers on Hurricane Matthew and Irma. She has two recent books: <u>Florida Weather and Climate: More Than Just</u> <u>Sunshine, and Hurricanes and Climate Change (ed.)</u>.

#### **Special Award**

#### Wassila Mamadou Thiaw

Meteorologist, NOAA Climate Prediction Center, College Park, Maryland



For tireless commitment to building capacity in Africa and the developing world, leading to improved climate services and reduced risk from natural disasters

Dr. Wassila Mamadou Thiaw is a meteorologist and the team leader of NCEP/CPC's International Desks. He has worked extensively on climate

monitoring and forecasting for Africa and the tropics. The International Desks supports the U.S. Government humanitarian mission overseas. Dr. Thiaw also leads the CPC residency training program for scientists from developing countries. He was a NAS/NRC postdoc fellow at NOAA/NESDIS. He's served on the AMS Council and in various AMS and WMO committees.

## The Award for Outstanding Achievement in Biometeorology

Mark D. Schwartz

Distinguished Professor, University of Wisconsin, Milwaukee, Wisconsin



For innovative advancements in phenological modeling and observations, and exceptional achievements in promoting knowledge and applications of phenology for the benefit of research and society

Mark D. Schwartz is a phenoclimatologist and distinguished professor of geography at the University of

Wisconsin-Milwaukee. He is co-founder of the USA National Phenology Network. His research interests focus on plant phenology-lower atmosphere interactions during the onsets of spring and autumn in mid-latitudes, climate change, and vegetation condition remote sensing. His scholarship includes over eighty peer-reviewed publications, and an edited book on phenology. Prof. Schwartz received his Ph.D. from the University of Kansas in 1985.

# The Helmut E. Landsberg Award

## Fei Chen

Senior Scientist, Research Applications Laboratory, National Center for Atmospheric Research, Boulder, Colorado



For leading the development of the WRF-Urban Modeling System and significant contributions to understanding urban environmental issues

Fei Chen is a senior scientist at the National Center for Atmospheric Research. He received B.S. degree from Nanjing Institute of Meteorology, China, and M.S. and Ph.D.

degrees from Blaise Pascal University, France. His research includes influences of land–atmosphere interactions on precipitation, land-surface process and the development of community land models, and impacts of urbanization and agriculture on regional weather, climate, and air pollution. Dr. Chen is a Fellow of the AMS.

## The Francis W. Reichelderfer Award

#### John A. Quagliariello

Warning Coordination Meteorologist, NOAA/National Weather Service, West Columbia, South Carolina



For extraordinary service to emergency managers and the people of South Carolina before, during, and after historic Hurricanes Matthew and Irma

John Quagliariello is the Warning Coordination Meteorologist at the National Weather Service in Columbia, SC, where he ensures that the office delivers the highest quality weather related

products and services to its partners. He also provides high impact weather briefings and support to key decision makers and has been deployed to support numerous large events/incidents nationwide. John received a B.S. in atmospheric science from Stony Brook University and has been with the NWS since 1999.

### The Charles E. Anderson Award

#### Renee A. McPherson

University Director and Associate Professor, University of Oklahoma, Norman, Oklahoma



For extraordinary, sustained efforts to broaden participation of traditionally underrepresented individuals in STEM research and education, particularly women and Native Americans

Dr. Renee A. McPherson is associate professor of geography and environmental sustainability at the University of Oklahoma (OU) and University Director

of the South Central Climate Adaptation Science Center. She holds B.S. degrees in mathematics and meteorology (University of Wisconsin) and M.S. and Ph.D. in meteorology (OU). Her research includes the societal and ecological impacts of climate variability and change, regional and applied climatology, mesoscale meteorology, severe local storms, land-air-vegetation interactions, and surface observing systems.

## The Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist

## Steven A. Root, CCM

Senior Vice President, Strategic Initiatives, AccuWeather, Inc., Edmond, Oklahoma



For providing innovative meteorological solutions to clients, and leadership in creating understanding across America's weather enterprise

Steven Root, AccuWeather's Senior VP of Strategic Initiatives, has pioneered unique meteorological applications serving consumers, businesses and governments for over 30

years. He co-invented over forty patents and has supported the development of numerous renewable wind, geothermal and solar energy projects. President of the American Weather and Climate Industry Association, Steve has earned B.S. and M.S. degrees from the University of Utah, is a Certified Consulting Meteorologist and Fellow of the American Meteorological Society.

# <sup>40</sup> The Award for Outstanding Contribution to the Advance of Applied Meteorology

Jerome P. Charba Research Meteorologist, NOAA/NWS/MDL, Silver Spring, Maryland



For a lifetime of extraordinary leadership and accomplishment in developing and implementing statistical forecasting methods for severe weather, quantitative precipitation, and lightning

Dr. Charba has been conducting the development and implementation of statisticallybased prediction of convective storms at the Meteorological

Development Laboratory of the National Weather Service/ NOAA for almost 47 years. During this period he authored or co-authored 71 journal articles and technical papers and has served on many government agency scientific assessment and development teams. He received a Ph.D. in meteorology from the University of Oklahoma in 1972 and awarded the U.S. Department of Commerce Bronze Medal in 2001.

## The Kenneth C. Spengler Award

## Raymond J. Ban

President, Ban & Associates, LLC, Marietta, Georgia



For outstanding leadership, community service, and dedication to fostering collaboration across the public, private, and academic sectors

Raymond J. Ban is retired Executive Vice President of Programming, Operations and Meteorology at The Weather Channel, Inc. He is currently President of Ban & Associates and

is also a guest-lecturer at The Pennsylvania State University. Ban has been associated with The Weather Channel for over 35 years and is considered one of the founding members of the all-weather television network. He is a Fellow of the AMS and holds both the Television and Radio Seal of Approval.

## The Cleveland Abbe Award For Distinguished Service to the Atmospheric and Related Sciences

## Donald L. Veal

Atmospheric Science Dept. Head (Retired), University of Wyoming, Longmont, Colorado



For visionary leadership in the creation of airborne observational capabilities in service of atmospheric science, and for exemplary management of major educational and research activities

As part of the University of Wyoming's initial Atmospheric Science Department, a salvaged C45 and HP2114 computer

was the first aircraft to automate weather observations. The team acquired a King Air 200, which was fitted with ever more complex sensors and data acquisition systems allowing direct observation including thunderstorms. The King Air is still in use today. Veal served as the department head of atmospheric science as well as University of Wyoming president.

## The Charles Franklin Brooks Award for Outstanding Service to the Society

David J. Stensrud

Professor and Head, The Pennsylvania State University, University Park, Pennsylvania



For exceptional contributions to the Society through service as editor and co-chief editor of Weather and Forecasting, chair of the Mesoscale Processes Committee, and STAC Commissioner

David Stensrud is professor and head of the Department of Meteorology and Atmospheric Science at The Pennsylvania

State University. He received a B.S. degree from the University of Wisconsin-Madison and M.S. and Ph.D. degrees from The Pennsylvania State University. His research interests include ensemble data assimilation, ensemble forecasting, severe weather, predictability, boundary layer circulations, and the North American monsoon. Before moving to Penn State, he was a research scientist at NOAA's National Severe Storms Laboratory. 41

## The Jule G. Charney Medal

J. David Neelin Professor, University of California, Los Angeles, Los Angeles, California



For fundamental contributions to understanding tropical climate dynamics and the impact of anthropogenic forcing on precipitation, drying, circulation, and extremes

David Neelin is a Distinguished Professor of Atmospheric and Oceanic Sciences at UCLA, and Fellow of the Royal Society of Canada, with interests including

ocean-atmosphere interaction, interaction between moist convection and large-scale motions, sensitivity of precipitation processes, and stochastic representation of these. He has authored upwards of 180 scientific papers, a textbook on climate change and climate modeling — and is happiest when brainstorming with collaborators, hunting for theoretical insights into pragmatic climate system problems.

#### The Sverdrup Gold Medal

## Fei-Fei Jin

Professor, SOEST, University of Hawaii at Manoa, Honolulu, Hawaii



For seminal and lasting contributions to understanding ocean–atmosphere interactions in the tropics and midlatitudes

Fei-Fei Jin is a professor at SOEST of University of Hawaii. He received his B.S. (1982) from Nanjing University of Information Science and Technology and Ph.D. (1985) from Institute of Atmospheric Physics of Chinese

Academy. His research interests cover a broad range of topics on large-scale atmosphere and ocean circulations and climate variability, with a focus on the dynamics of El Niño-Southern Oscillation and extratropical atmospheric variability. He is an AGU fellow.

## The Verner E. Suomi Technology Medal

## Patrick Minnis

Consulting Research Scientist, Science Systems and Applications, Inc., Hampton, Virginia



For numerous, innovative advances in remote sensing techniques to understand clouds and radiative processes

After 36 years at NASA Langley, Patrick Minnis continues the study of satellite remote sensing with SSAI. He has co-authored more than 300 peer-reviewed papers on clouds, contrails, and aerosols for climate, weather,

and aviation, supported by a team of talented researchers. Many papers were collaborations with colleagues from universities and national and international government agencies. He was educated at Vanderbilt, CSU, and the University of Utah. He is a Fellow of AMS and AGU.

#### The Henry Stommel Research Medal

## Martin Visbeck

Professor of Physical Oceanography, Kiel University/ GEOMAR, Kiel, Germany



For outstanding contributions to understanding ocean circulation and mixing, and the role of the oceans in climate

Martin Visbeck holds the chair of Physical Oceanography at GEOMAR Helmholtz Centre for Ocean Research Kiel and Kiel University, Germany. His research interests revolve around ocean dynamics and mixing, the

ocean's role in the climate system, integrated global ocean observation and ocean sustainable development. Through his participation in several national and international advisory committees, Martin Visbeck is involved in a wide range of strategic planning processes about ocean science at the national, European and global level.

# The Hydrologic Sciences Medal

James A. Smith William and Edna Macaleer Professor of Engineering and Applied Science, Princeton University, Princeton, New Jersey



For exceptional contributions to understanding physical and statistical aspects of flood hydrology, urban hydrometeorology, and hydroclimatology

Jim Smith is the William and Edna Macaleer Professor of Engineering and Applied Science in the Department of Civil and Environmental Engineering at

Princeton. Prior to joining the Princeton University faculty, he was a research scientist at NOAA. Smith's research interests center on the hydrometeorology of flooding. He is a Fellow of the American Geophysical Union and the American Meteorological Society (AMS) and was the 2011 Robert E. Horton Lecturer of the AMS.

#### The Carl-Gustaf Rossby Research Medal

Inez Y. Fung Professor, University of California, Berkeley, Berkeley, California



For fundamental and pioneering contributions to understanding biosphere—atmosphere interactions through modeling and data assimilation approaches to synthesizing surface- and space-based measurements

Inez Fung seeks the hidden rules that govern the co-evolution of climate and atmospheric

composition, and enjoys the surprises in observations and models. She received her S.B. in applied mathematics and Sc.D. in meteorology from MIT, and is a professor of atmospheric science at the University of California, Berkeley. Fung is the subject of "Forecast Earth", her biography in a series for middle-school readers "Women's Adventures in Science" launched by the National Academy of Sciences.

#### **AMS Honorary Member**

## Marcia McNutt

President, National Academy of Sciences, Washington, District of Columbia



Marcia McNutt is a geophysicist and the 22nd president of the National Academy of Sciences. From 2013 to 2016, she was editor-in-chief of *Science* journals. McNutt was director of the U.S. Geological Survey from 2009 to 2013, during which time USGS responded to a number of major disasters, including the Deepwater Horizon oil spill. For her work to help contain

that spill, McNutt was awarded the U.S. Coast Guard's Meritorious Service Medal.

#### **AMS Honorary Member**

# Tim Palmer

Royal Society Research Professor, University of Oxford Oxford, United Kingdom



Tim Palmer is a Royal Society Research Professor at Oxford University and was previously Division Head at the European Centre for Medium-Range Weather Forecasts. Tim's research has spanned a range of topics on the dynamics and predictability of weather and climate - from the stratosphere to the oceans. He introduced probabilistic ensemble

forecasting to operational weather prediction, first at the Met Office and then at ECMWF. Tim has won both the AMS Charney and Rossby medals.

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# $100^{\text{TH}}$ ANNUAL MEETING

See you in



# Boston, Massachusetts 12–16 January 2020